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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,066	09/19/2006	Ludwig Brehm	1093-162 PCT/US	3721

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HOFFMANN & BARON, LLP  
6900 JERICHO TURNPIKE  
SYOSSET, NY 11791

EXAMINER
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GRABOWSKI, KYLE ROBERT

ART UNIT	PAPER NUMBER
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3725

MAIL DATE	DELIVERY MODE
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09/11/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,066	<b>Applicant(s)</b> BREHM ET AL.	
	<b>Examiner</b> Kyle Grabowski	<b>Art Unit</b> 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/07/09</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This is a non-final action in response to the amended claims filed on 06/23/07. The examiner apologizes for incorrectly conveying that the amended subject matter specifically "at least one through-hole" would differentiate over Moreau as discussed via telephone interview on June 2, 2009. In the detailed description Moreau does not elaborate on the "zone of reduced thickness" and the attorney correctly pointed out that at least one technique of creating the zones (e.g. WO/99/14422, which is incorporated by reference) only locally reduces the thickness of the windows creating transparent regions that are not through holes however upon further consideration another technique (WO/95/10420, which is also incorporated by reference) cuts a through hole directly in the paper. As such the amended subject matter, per se, does not differentiate the prior art.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-2, 4-5, 7, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moreau (EP 1,398,174) in view of of Cote et al. (US 2005/0040641).

5. In respect to claims 1, 4, 6-7, and 14-16, Moreau discloses a banknote comprising: a paper support 1; a film element 11 having optical security features 15; and a transparent sealing layer 14; the support 1 has window-shaped openings 2 (which may be through holes, 0009) which are closed by the film element 11 which projects beyond it on all sides; the sealing layer 14 covers the film element at least in the region of through holes 2 and is on the opposite side of paper support 1 to film element 11 (0027, Fig. 4).

6. Moreau does not disclose providing the lacquer layer (broadly synonymous with sealing layer) via a printing, pouring, sprinkling, or spraying method however, Cote et al. teach providing a protective layer lacquer layer comprising, for example, polyethylene terephthalate (PET) (0044) which may be applied as a printed coating of preferably 4 to about 8 microns (0043) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the lacquer layer taught in Moreau as a 4 to 8 micron thick PET printed coating as taught in Cote et al. to provide a material and

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thickness that effectively acts as a barrier to chemical penetration (0043, Cote et al.).

Furthermore, the claim would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art (i.e. providing a sufficient thickness for desired properties is a technique within the purview of one of ordinary skill; similarly providing the lacquer layer through a printing operation is a known technique).

7. In respect to claim 2, Moreau further discloses that the second strip 10 (sealing layer) may be same size as the strip 3 (0023, Fig. 1). Note that the embodiment above in claim 1 incorporates elements of this embodiment (0027).

8. In respect to claim 3, Moreau substantially discloses the claimed subject matter for the reasons stated above including that the sealing layer may be larger than the film element (0023) but does not disclose the particular range of 100% to 120% larger. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a relatively larger sealing layer of 100% to 120%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.p. Furthermore, Figure 1 shows the sealing layer 10 only marginally larger than film element 3, so apparently just over 100% (i.e. not exceeding 120%).

9. In respect to claim 5, Moreau discloses that optical security feature comprising printing (0015).

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In respect to claims 8-13, Moreau discloses that the film element may comprise PET (0022). Moreau as modified by Cote et al. teach a PET lacquer layer. Because Moreau as modified by Cote et al. teach the film element and sealing/lacquer lacquer as PET, they share the same material properties such as expansion coefficient, length expansion coefficient, modulus of elasticity, etc. are the same.

10. In respect to claims 14-16, Moreau discloses the claimed subject matter for the reasons stated above.

11. In respect to claims 16-20, Moreau as modified by Cote et al. teach the claimed subject matter for the reasons stated above. The combination of Moreau and Cote et al. teach providing a sealing layer formed of a printed coating and applying it to cover a through hole on a substrate. This combination would result in the sealing layer engaging at least a portion of the cut edges and forming the inner surfaces of the through-hole and engaging the film element. This is due to the physical properties of the lacquer where the thick and viscous coating wraps into inner holes provided between indicia 14, which is analogous to the covered through holes each bearing significant changes in cross section (Fig. 9); Cote et al. specifically teach that the lacquer *fully encapsulates* the material to be protected (Col. 5, 54-61 & Abstract).

***Response to Arguments***

12. Applicant's arguments filed on 06/23/09 have been fully considered but they are not persuasive. As discussed above, Moreau does disclose through holes in the banknote.

13. Although the rejections have changed, the thrust of the rejections haven't changed and therefore the contention that the combination of Moreau in view of Cote et al. is improper will be addressed.

The applicant's representative contends that Moreau does not disclose the material composition of the strip, however the examiner disagrees because the strip of transparent material 3 (generic embodiment) may be PET, and an embodiment calls for a first and *second* strip of transparent material, which are an embodiment of the representative transparent material 3. Regardless, whether or not Moreau discloses the second transparent strip being fashioned from PET, Cote et al. provides a PET laminate.

14. The applicant's representative contends that "there is no disclosure or suggestion in Cote et al. to apply such a sealing layer or protective coating to a paper support having through-holes therein" however *Moreau* discloses this feature (providing a protective coating to a paper support having through-holes therein). In response to applicant's arguments against the references individually (i.e. Cote et. does not provide the sealing layer to a document having through-holes therein), one cannot show nonobviousness by attacking references individually where the rejections are based on

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combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Cote et al. is applied as a teaching for 1) a sufficient layer thickness and 2) a suitable method of application (printing). A motivation for the thickness of the layer is discussed above.

15. The change in rejection in claim 1 from disclosed solely in Moreau to obvious over Moreau in view of Cote et al. was executed for the following reason: the "printing, pouring, sprinkling, or spraying" were considered product-by-process limitations however upon further consideration such limitations result in a particular structure that differentiates from a solid film. As such Cote et al., which teaches printing the lacquer layer, was applied.

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle Grabowski whose telephone number is (571)270-3518. The examiner can normally be reached on Monday-Thursday, every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571)272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kyle Grabowski/  
Examiner, Art Unit 3725

/Dana Ross/  
Supervisory Patent Examiner, Art  
Unit 3725